L. R. B. & M. JOURNAL

VOLUME 36 NUMBER 2

APRIL-JUNE 1955

Pencils, Paper, People and Push Button Accounting

The Application and Use of Machines and Electronics in Accounting

Published by

LYBRAND, ROSS BROS. & MONTGOMERY

Certified Public Accountants

Table of Contents

Some Thoughts on Pencils, Paper, People and Push Button Accounting 1
By A. R. Kassander

The Application and Use of Machines and Electronics in Accounting 7
By Kermit M. Pennington

The Prize-Winning Articles for 1954 . . 17

Editorials 19
Carl T. Keller
William T. Sherwood

Notes 20

L. R. B. & M. JOURNAL

VOLUME 36 APRIL-JUNE 1955 NUMBER 2

Some Thoughts on Pencils, Paper, People and Push Button Accounting

BY A. R. KASSANDER
(New York Office)

INTRODUCTION

We might start these comments with recognition of the fact that "Electronics" and "Automation" are here to stay. So is the airplane, but, except for the fact that the *Streetcar Named Desire* is now a bus and that the status of the horse has changed from beast of burden to a sports accessory, there is no evidence of the imminent obsolescence of earth-bound transportation.

I have a deep conviction that for the vast majority of business enterprises the primary accounting problem is the form and content of reports to management at all levels of responsibility, the skillful interpretation of the significance of information and the managerial initiative to make appropriate decisions. The route that is followed in proceeding from original evidences of transactions to such end reports is an important problem of bookkeeping and office management, but the nub of accounting is quality of accounting and operational data logically presented and skillfully analyzed. In those areas there is much to be done and that can be done only by accountants and managers acting in their professional capacities. Automation of office operations will profit us little if it merely serves to accumulate more poorly organized data more rapidly.

The accountant has the primary responsibility to present the data he accumulates effectively and promptly but with it a duty to make use of the most efficient and economical methods in so doing. To revert to the airplane analogy for a moment, it is of first importance to decide where we are going, why, and what we are going to do when we arrive at our destination. Only then is it necessary to decide on the means of transportation.

So, I suggest that we examine the elements of these latest office procedures and observe the extent to which they may be evolutionary rather than revolutionary. The purpose of such an examination is directed toward establishing some relationship between organizational and accounting structure and resulting reports and the purely mechanical aspects of processing paper work.

ELEMENTS OF OFFICE AUTOMATION

The broad subject of office automation may, I think, be broken down into three major areas, namely, (1) integrated data processing, (2) high speed computation and (3) communication.

Integrated Data Processing: This term is applied to a procedural concept which in its simplest statement provides for (a) the recording of data at the point of origin and (b) the perpetuation of original and subsequent data by mechanical means. Certain common procedures in wide use are in fact elementary examples of integrated data processing, e.g., combined order writing and billing procedures, the use of copies of purchase orders as receiving and inspection reports, the use of punched cards and tabulating machines for a variety of records and reports, the simultaneous preparation of payroll register, employees' wage records and checks.

Until recently, the limits of integration were set by the fact that various types of office equipment use a "language" peculiar to themselves. That is to say, that having typed the sales order, for example, much of the data had to be rewritten or recorded over again on subsequent operations such as inventory records, production control records, punched cards or even to make simple adding machine listings or extensions of quantities and prices. Each such subsequent step involved handling, recording and checking. Other examples will no doubt occur to the reader of repetitive handling of the same information as records move from operation to operation.

Thus, there was recognized the need for a device which would enable an office machine to use the record prepared by another type of machine without the need for intervention of the usual clerical operations. This device came to be known as the "common language" and consists of (1) the creation, at the point of data origin and as the automatic by-product of the recording operation, of punched tapes or punched tabulating cards and (2) the ability of other office machines to read such tapes or cards and to create subsequent data in the form of other punched tapes or cards.

It is now possible to acquire in the office equipment market a wide variety of conventional types of office machines equipped to "read" and "write" the "common language" and thus avoid much repetitive manual recording of common information.

High Speed Computation: The second area of activity which affects office automation is high speed computation. Here, perhaps, the term "revolution" is apt because of the tremendous differences in speed between electronic digital computers and previously available computing

mechanisms. However, even in this area the need to integrate the computation processes with other clerical procedures gives rise to a twofold evolutionary development.

Both phases stem from the fact that mere speed of computation may not justify economically the cost of high speed computing equipment unless simultaneously equivalent speed is available in the operations of introducing data into the computer and recording the results and in the clerical handling of data between a sequence of related computations. The latter problem has been resolved by the use of "memory" or data storage and sequential programming of computer operations in such a manner that a series of computations may be made by passing the data through the computer only once and the elimination of intermediate handling.

Spectacular progress has been made and is continuing in solution of the first problem, namely, "input" and "output" through the development of high speed printing mechanisms coupled with integrated data processing previously discussed.

In this area, also, there exists a variety of special purpose computers, in some cases built into the familiar types of office machines. Wherever they are applicable, many problems of speeding up office work may be solved by their use, or may lead to the eventual use of large, general purpose computers where they can be justified.

Communication: This third area of office automation enters the picture because integrated data processing and high speed computation, to be economically feasible, demand a high degree of centralization of the processing and computing functions. The historical trend toward decentralization of accounting activities paralleled the management concept of decentralization of operating responsibility largely because of the time lag involved in transmitting accounting data to the centralized source and, more important, the time lag in transmitting reports back to the operating units for the use of decentralized managements.

The punched paper tape, the "common language" previously mentioned, is the basis of high speed communication facilities provided by the telephone and telegraph companies to speed the transmission of raw data to centralized data processing units and the return of end reports to the operating locations.

To summarize, the three basic components of office automation may be said to comprise integrated data processing through use of a "common language," high speed computation and rapid communication.

Some Pros and Cons of Automation

These several segments of office automation may in many cases be applied quite independently of each

other to specific situations. The emphasis of these "thoughts" is not directed toward such areas. Obviously, if certain operations within an established procedure or organizational group can be performed more efficiently by use of new types of equipment of whatever nature, the alert office manager will take steps to introduce such advanced methods.

Rather, I am concerned with the grandiose vision of an "automatic" office in companies which are not ready for it, which do not need it, in which the organizational climate is not conducive to successful operation and where a much smaller expenditure of time, effort and money might produce more tangible benefits. I feel certain that many of our industrial and commercial organizations fall into one of these categories.

In the introduction to this discussion, I stated that the primary accounting problem is the form and content of reports to management and the skillful interpretation of the significance of information coupled with managerial initiative to make appropriate decisions. I am reminded of the old fashioned farmer who rebuffed the advances and suggestions of the modern graduate of an agricultural college with the statement "I don't need these new ideas, I already know how to farm better than I do."

Are we accounting as well as we should with the pre-automatic methods? What are we doing with the information we now get when we get it? Unless we are using it to its fullest capabilities, what benefit will accrue from more information faster?

It seems to me that many a management might be well advised to consider the potential benefits from a modest investment in a strengthened accounting department, both in quantity (where necessary) and quality directed toward refinement of procedures, elimination of superfluous paper work, improved accounting structure and organization and more significant management reports, prepared with reasonable even if not electronic speed.

A company with an annual sales volume of the order of $1,000,000,000, and which spends, let us say, $10,000,000 a year for accounting salaries, is in a position to spend several years and several million dollars to investigate and plan an optimum automatic program. A company one-tenth that size (still a very substantial operation) will obviously receive markedly smaller benefits from such a program.

A review of some recent literature and statements on the subject of automation in the office discloses two significant comments. One, no company which has gone into the subject seriously has spent less than two years on the research, investigating and planning phases alone, and, two, no company feels that the effort has been nonproductive, whether or not complete

office automation was finally adopted. The reason for the first conclusion lies in the tremendous amount of detailed procedure analysis required as a condition precedent to preparing the instruction manuals for integrated data processing and the coded programs required for electronic computing machines. One company which has integrated procedures from sales order to invoice states that 203 pages of instructions are devoted to the proper placing of information on the sales order forms.

The reason for the second conclusion lies in improved procedures which resulted merely from the analysis of existing procedures and their consequent revision. This in companies which, to all appearances, already had a sound accounting and management program.

Consider the benefits which might accrue from a moderate but sustained and continuous procedure study in the following circumstances based on actual experience, which I am sure could be duplicated in many instances. The management of a substantial, successful and well managed company evinced interest in the possible benefits from office automation. Recognizing the need for substantial procedure analysis, one of the early questions was directed toward the status of existing activities in the area of study and formalization of office procedures. It developed that there were virtually no written accounting procedures and not a single person whose primary, if not sole responsibility, was the promulgation of effective office methods.

I recall a personal experience where production on a strictly manual office operation was increased fourfold simply by a study of the task, introduction of orderly and clear instructions, elimination of bottlenecks and waste motion, and intelligent supervision.

It is quite possible that some managements would feel that the steady grind of continuous procedure study is too dull and prosaic to maintain interest, whereas the glamor associated with much discussed automation would provide the enthusiasm necessary for success. This, even though the end benefits from the more conventional program might be fairly close to those available from the so-called automatic office.

To offset this feeling, it should be remembered that the "pot of gold" of automation is not at the end of a pleasant rainbow but can only be reached via a hard road of the most detailed procedure work. It should also be observed that to achieve integrated data processing it is frequently necessary to alter in a substantial manner the structure of departmental organization, authority and responsibilities. That is, the organization and operation may have to be fitted to the "system" rather than the more usual reverse emphasis.

Among the advantages claimed for some of the high speed computing and data processing devices is the feasibility of developing statistical data and solving involved accounting problems which previously had been impracticable if not impossible due to the sheer weight of manpower and time required. Some of these possible uses are of unquestionable value and importance; others are interesting intellectual exercises or comfortable information to have available, but hardly of sufficient moment to influence a decision for, or against, the equipment.

SUMMARY

The primary accounting problem is the form and content of reports to management, the skillful interpretation of the information and managerial initiative to make appropriate decisions. The accountant has a collateral duty to employ the most efficient and economical methods for recording and summarizing accounting data.

The essential elements of office automation are integrated data processing, high speed computation and communication. These several elements may in many cases be applied quite independently of each other to specific situations within an established procedure or organizational group.

When weighing the extension of the principles of automation to the ultimate "automatic office" consideration should be given to the intensive and expensive program of organizational and procedural planning which is necessary. This effort should be related to the benefits in quality of accounting with accompanying clerical efficiencies which might be obtained from a modest investment in a strengthened accounting department directed toward continuous refinement of procedures, elimination of superfluous paper work, improved accounting structure and organization. High quality of accounting thinking and resulting information to management at reasonable cost may be more important than an overwhelming quantity of poorly organized data.

Lest I be accused of trying to apply brakes to the engine of progress, may I say that I recognize such an attempt as both futile and stupid. May I suggest, however, that this engine will be safer if it is equipped with a fly-wheel. We shall be making a mistake if we either overestimate or underestimate the potential of so-called push button office operation.

None of the push button devices can be expected to supplant fully the accounting structure directed by human brains. The new devices can only supplement the old. Let us recall that Einstein, whose $E = mc^2$ opened the atomic era, used only pencil and paper.

The Application and Use of Machines and Electronics in Accounting*

By Kermit M. Pennington
(St. Louis Office)

The question I propose is this: Will accounting machines and electronic data processing machines ever replace accountants? The answer is: No, definitely not, but accountants will employ them as tools, and therefore they must learn their capabilities and how to use them.

The application and use of machines and electronics in accounting could be considered an outgrowth of many of the mechanical and electronic inventions of the past decades. This is especially true in the field of electronics where the first computers were developed for scientific and mathematical calculations rather than for use in the field of accounting. This has changed, and the accounting application is now a field of its own and presents a greater challenge to the inventors and manufacturers of these machines than the development of electronic computers for the solution of mathematical equations.

History

Let us take a few minutes to turn back the pages of history and have a look at the ancestors of our present computers. All of them have a common origin—the abacus, which originated thousands of years ago. The system employed lines or tables on which counters were traced.

The construction of the abacus varied in ancient times, depending upon the materials available, geographic location and state of culture of the users. The first system used dust, then more elaborate machines (if we may call them such) were developed by the Romans using grooved wax boards with bronze, ivory, or colored glass counters. The Chinese and Koreans employed bamboo rods for counters until the 19th century. The Egyptians used pebbles for counters and counted from left to right. Pythagoras, the Greek philosopher of triangle fame, used the abacus, but reversed the direction of count. The Russians, Turks and Armenians developed similar types of abacuses. (I don't believe the Russians have claimed to be the first to use the abacus —yet!)

Today you will find the abacus being used in Oriental countries, in Chinese laundries in this country, and it may be bought as a counter board in any toy shop.

*This paper was presented by Mr. Pennington on April 19, 1955 at a meeting of the Cedar Rapids, Iowa, Chapter of N. A. C. A.

In January of this year science received a setback, at least temporarily, at St. Louis University. A Japanese student, with an abacus, challenged another student, with an adding machine, to a contest involving addition and subtraction. The Japanese won ten times running, sometimes by as much as twenty seconds!

This brings out an important point for consideration in the mechanization of today's business office, and that is that the fastest method to get the desired result is generally the best, whether it be by paper and pencil or by a million dollar electronic computer.

In 1617 John Napier invented a system of rods for multiplication. Blaise Pascal, a Frenchman, whose father denied him instruction in science until he had mastered Latin and Greek, spent his extra time studying geometric designs and writing his own mathematical definitions. At the age of sixteen he had written the first thirty-two theories of Euclid, not knowing Euclid had preceded him. In 1642 he invented the first adding machine.

Mr. William Seward Burroughs, a bookkeeper in a bank in Auburn, New York, in 1880, believed he could invent a machine that would add. In 1891 the American Arithmometer Company introduced the first practical adding machine in St. Louis. Mr. Burroughs had spent ten years of his life and approximately $300,000 in developing this machine.

The following appeared in a St. Louis daily newspaper as part of an advertisement of the early Burroughs adding machines:

> Belgrade: Damian Stanislitz, station master of Yogodin (Servia) was so upset at finding a deficit of $1.25 in his accounts that he committed suicide after writing the railway company stating his error.
>
> When his accounts were examined, it was proved that an error in casting up had led him astray. There was not a penny missing.

The punch line of the ad informed the reader that Burroughs adding machines were available through the company's St. Louis agent.

Dr. Vannevar Bush, of the Massachusetts Institute of Technology, developed a so-called "mechanical brain" in the late twenties to solve problems in differential calculus. The first "giant brain" was a result of research on dial telephones in the late 1930's by the Bell Laboratories. The Mark I, built by Harvard University and International Business Machines in 1944, was the first "thinking" machine to get wide publicity. Today there are many large electronic computers in the country on as many different or varied applications, in addition to thousands of smaller ones—about the size of electric refrigerators. Several of the manufacturers have now moved into mass production on both giant and smaller electronic computers, so we may expect the total number and uses of these

machines to increase rapidly during the next decade.

Machine Accounting

The fundamental principles of accounting can best be taught by use of pencil and paper, or what is termed the "hand system" of bookkeeping. In this modern age, the hand system in business has, to a large extent, been replaced by mechanical, and in most recent years, by electronic systems. The student getting out of school who has not had any courses in machine or electronic accounting is greatly amazed by the automation of the business world, as compared to what he was taught in school.

Some of the principal advantages of machine systems over manual systems are:

1. The automatic addition, subtraction and computation of balances and accumulated control totals while posting.
2. The protection of records where the handling of cash is involved.
3. The posting of transactions to two or more forms simultaneously.
4. The provision for mechanical proof of the work.
5. The recording of a large number of transactions faster and with a higher degree of accuracy.
6. The translating of the raw data of the transaction into a mechanical form facilitates further processing and summarization.

Accounting machines may be segregated into three general classes, namely multiple-purpose bookkeeping machines, special machines, and tabulating equipment. The first group may be further divided between descriptive and nondescriptive machines, meaning the presence or absence of a typewriter keyboard, and include such standard applications as posting accounts receivable records, general ledger, voucher systems, payroll, and other general applications. The second group, or special machines, includes those which are built for a specific purpose, and are more or less limited in their applications, such as central control and proof in banks, validating of sales invoices and cash receipts, billing, distribution, and window posting (used in hotels and savings banks). Tabulating equipment consists of several different machines, each performing a specific function in the processing of data by means of punched cards. Such equipment is employed in a wide variety of applications. During the past fifty years the typewriters, adding machines, calculators, bookkeeping machines, and tabulating equipment have led to the increasing mechanization of office procedures.

Have machine systems reached their peak of perfection? The answer to this question is in the negative. There is continuous development and research in accounting machines to improve their efficiency and expand their capabilities. One of the more recent developments, and one which has meant considerable savings to com-

panies, was the method of preparing the quarterly federal social security and state unemployment tax returns simultaneously. This is a very simple operation prepared on a three-part form: (1) federal return, (2) state return, and (3) file copy. The columns for the state information are blocked out on the federal return, and vice versa on the state return. All of the data appears on the file copy. The gross amount taxable under social security and unemployment is first set up in the machine. The form is placed in the machine, and the operator enters the employee's name, social security number, earnings to date this year, and earnings to date previous quarter. The machine automatically does the rest, computing and entering the earnings for the current quarter, taxable wages under social security and state unemployment, and excess over $4,200 and $3,000 nontaxable. The machine accumulates column totals for each page. Since all computations are mechanically achieved, and since a total of all earnings is stored in the machine to balance against the payroll control figures, perfect accuracy is obtained.

Principles of Electronics

The subject of electronics and electronic devices is one of intense and rapidly growing interest to business and the country in time of peace and war.

Mr. Alfred N. Goldsmith, a consulting engineer, suggests three principal capabilities of electronics which are of particular interest: (1) Electronics can extend or improve the senses of man, (2) Supply an electric substitute for the physical or mental processes of the human individual, and (3) Handle operations which the human brain or hands cannot carry out, at least in a reasonable length of time. We are in daily contact with the application of these capabilities, but more or less take them for granted. The ability to extend or improve the senses of man is one of the most common uses of electronics, found in radio, television, amplifiers, hearing aids, electron microscopes, and many other products of human ingenuity. Secondly, the supplying of an electric substitute for the physical or mental processes of man is a great convenience and has many economical applications. Some of these uses include the automatic operation of doors (as used in many stores today), operation of machinery where it is uncomfortable or dangerous for man (as around furnaces and on smokestacks), and guarding plants or vaults. The third capability, to handle operations which the human brain or hands cannot carry out, at least in a reasonable length of time, is illustrated by the development and use of electronic computers. When you use the telephone, you are using a specific application of these machines. The

first "giant brain" was developed through research on dial telephones.

Electronic Accounting

Electronic data processing machines, as applied to business problems, may well be considered the new generation of business machines which have already created an important place for themselves among the family of business tools and are leading to automation of office procedures. Such machines are capable of performing mathematical and logical operations entirely within themselves. They consist of four units: the input devices, a memory and computing unit, output devices, and a supervisory control panel.

The basis of supplying raw data to and receiving processed information from the machine is by means of punched cards and/or tape. The punched card is of the same type as that used in tabulating equipment. Tape is the fastest media for transmitting data to and from the machine. Information is recorded in the code or common language of the machine as punched holes in paper tape and as magnetic dots on metallic or plastic tape.

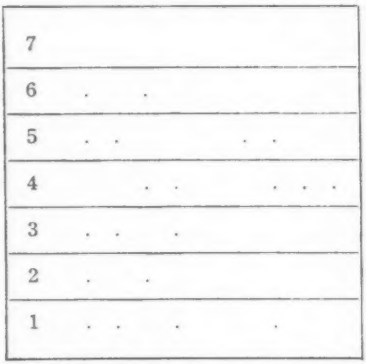
The alphabet, Arabic numerals, and other symbols are coded by use of Binary arithmetic or a modification thereof for recording on the tape. Pure Binary arithmetic uses only two characters, one and zero. Different combinations of these, in a four-digit number, represent each of the numerals zero through nine. In order to obtain a pulse code for twenty-six letters, ten numbers and other symbols, it was necessary to expand the Binary system to more than four places. Several of the manufacturers are using a seven-digit code.

In a seven-digit excess three code the first digit is the check pulse, the next two digits are zone indicators, and the last four, which are three in excess of the pure Binary, represent the Arabic number. For example, the pure Binary for five becomes two in the excess three code. The positional value of the "1" in the pure Binary represents, 1, 2, 4, and 8 going from right to left. Examples of a seven-digit excess three code and the Binary system are as follows:

Excess Three Code	*Pure Binary*	*Character*
1 00 0011	0000	0
0 00 0100	0001	1
1 00 0101	0010	2
1 00 0110	0011	3
0 00 0111	0100	4
0 00 1000	0101	5
1 00 1001	0110	6
1 00 1010	0111	7
0 00 1011	1000	8
1 00 1100	1001	9
1 01 0100		A
0 01 0101		B
0 01 0110		C
1 01 1000		E
0 10 1010		P
1 11 0110		T
0 00 0001		Space
0 01 0000		Carriage return
1 10 1101		Shift to upper case

Below is a section of seven-channel magnetic tape, showing the word "Tape" and "1955." The dot (.) symbolizes the presence of an electronic pulse.

T A P E 1 9 5 5



The storage capacity of the magnetic tape varies with its length and the pulse density, which is the number of pulse recordings per inch. Some of the tapes now have a capacity of 5,760,000 characters, which would be equivalent to approximately 72,000 punch cards. Some other important characteristics of this tape are that it will preserve data permanently, or it may be erased and used again for new data.

The reels of magnetic tape are mounted on the input devices for transferring data into the memory and computing unit. The computing unit of the machine performs the logical and arithmetic processes necessary to convert raw source material into the desired results. Generally, it consists of storage or memory devices, various registers, computing circuits, and control circuits. There are several types of memory devices—mercury tanks, cathode ray and vacuum tubes, and magnetic tapes, cores and drums, which may vary in size and storage capacities of digits. Data may be stored in or obtained from these units at speeds ranging from approximately 5 minutes to 12/1,000,000 of a second. While the tape has a very large storage capacity, it must be read along its length, and therefore has relatively "slow" access time.

The output devices of the machine include tapes, cards, typewriters, and direct high speed printers, which will print at the rate of 900 lines per minute. The results may be printed in any format desired. The number of input and output devices and magnetic tape units may be varied widely to meet the requirements of a particular installation or problem.

The supervisory control panel permits the operator to manually insert data into the machine, and to read data from it. It also provides him with a means of following the progress of a problem through the machine and of making necessary changes and adjustments.

Much has been said about the speed of electronic computers, one of their most important features. The calculating speeds, stated in the number of operations per second

for eleven-digit numbers, are approximately: addition and subtraction 1,900 to 2,500, multiplication 250 to 450, division 250, and comparisons 2,500. These figures seem fantastic and difficult to comprehend. The rates will also vary in the actual solution of a problem. An actual case will best illustrate the savings in time, labor and expense that may be realized through speed of the machine in use. An electronic computer was used in a government military department in the preparation of some 120 complex actuarial tables. The computer prepared and checked the tables in 104 hours, and required 1,443 hours of clerical labor for all of the incidental and auxiliary operations in preparing the raw data for the computer, at a total cost of $15,000. It was estimated that the manual operation would have required 28,000 man-hours for the same job, and would have cost approximately $200,000, or fourteen times as much.

Economies

The adoption of electronic machines for accounting in industry will have a marked effect on what management will expect to receive in operating reports and when they will be due. The use of computers should result in substantial dollar savings in clerical labor, as well as provide better controls of business and operations from a management point of view.

The savings in clerical labor may be classified as simplifying operations, standardizing exceptions, and handling new work. The ability of the electronic computer to perform a sequence of mathematical and logical operations entirely within itself eliminates the clerical labor that is normally required to follow through the successive steps of an accounting procedure. When such procedure is analyzed, it is amazing to find the number of individual clerical steps required to complete the job in the accounting department.

In a punch card accounting system, which was the highest degree of mechanization available in the past, there still remain numerous steps requiring clerical labor. These machines were not capable of performing a series of steps without the aid of someone to transfer the data to the next successive step or machine. In other words, it was mechanization, but not automation. Take the example of the automatic transmission of the car of today, as compared with the transmission and clutch of the car of about fifteen years ago. Whereas previously it was a mechanical device, requiring human direction to the next successive step, today it is purely automatic. Therefore, the electronic computer, with its ability to follow through a sequence of operations as instructed from its program tape, eliminates most of the labor in the mechanized system,

and converts it to an automatic system.

The second means of saving clerical labor has to do with standardizing exceptions which, in the past, have had to be handled manually. To incorporate these with the normal flow of data being processed in a mechanized system disrupts the operations. Sets of routines can be prepared for handling all exceptions, whereas in mechanized systems much of the savings have been lost because of their manual processing. The ability of the electronic computer to follow a set of complicated instructions at very high speeds makes it practical to process the exceptions to the procedure with the normal transactions.

Finally, clerical labor may be saved in the handling of new work by the electronic computer, work which heretofore has never been susceptible of mechanization. Prior to this time, the mechanized areas in business were limited to those which did not involve judgment or decisions. For example, the machines of the past could not determine the amount of payroll that was taxable for social security nor could they compute eligibility for overtime, and then proceed with the calculation and preparation of the payroll in one pass of the data. Today this is common procedure for computers.

One of the capabilities of electronics is to handle operations which the human brain or hands cannot carry out, at least in a reasonable length of time, and for this reason there are many new horizons open for the application of electronic computers to business. The machine can choose alternative courses and make logical decisions, depending upon the answers obtained. However, there is a certain limiting factor to these applications, and that is man's ability to analyze a problem in logical steps and translate that analysis into the common language of the computer. These new fields provide great opportunities for savings of clerical labor, but the problem of supplying the computer with the program and accurate raw data for processing must not be taken too lightly. No product is any better than the raw materials from which it is made!

Forecasting

The dollar savings in clerical labor are important, but the controls available to management are not to be overlooked. The old saying of "hindsight is better than foresight" is being invaded by the electronic computer. Chrysler's slogan for 1955, "The Forward Look," is very applicable to electronics, since electronics certainly provides the "forward look" into business.

Management's real need is for timely projections and forecasts of business as a guide for charting future operations. In the past,

management has operated largely on reports of past operations—historical reporting. The time element is most important, because it may be a week or a month before current operating reports are prepared, and by then they are "history." Where management is supplied with significant operating data daily, corrections can be made immediately, thus avoiding what might have been a loss for the period.

The preparation of projections and forecasts requires a careful analytical study of the particular problem and business in general to determine all factors involved and how they will affect this problem. Consideration must be given to the weighting of all variables in proportion to their significance. The next step is to state these factors in a formula which can be translated into the language of the computer. As previously stated, this is the limiting factor in the application of electronic computers to business. Many techniques and formulae for the preparation of adequate forecasts have already been developed. The application of such procedures requires the compilation and manipulation of a tremendous amount of data, which has made it uneconomical to obtain adequate forecasts by manual or past mechanized procedures.

With the preparation of adequate "electronic" forecasts, reporting to management can now take on the aspect of the "forward look." Current historical data will be used as a means of adjusting any distortion in the projections for future operations. For example, in political news, forecasts of final election returns have been made at an early hour, based on past trends and all variable information on hand at that time, and adjusted for any distortion by current hourly returns.

Conversion

Before considering a conversion to mechanization or automation, an analysis of present procedures should be made. After such a review the following factors should be considered by smaller companies before making any change-over: (1) The type of operations—where repetitive operations occur in volume, electronics may be desirable; (2) The use of special-purpose machines may be preferable to converting all operations on a general-purpose machine; and (3) The use of a service bureau may prove more profitable than buying or renting the machines.

The preparation of the office for automation may take from one to two years or longer. One person should be placed in charge of the program, with a systems group to make an analytical review of present procedures. Their objectives should be to measure daily inputs and outputs with respect to each operation, and to eliminate unnecessary writing and duplication, thus simplify-

ing procedures. From this review it will be possible to determine the size of the machine needed. Once it is decided to convert to electronics, there begins the task of laying out the procedures in minute detail, step by step, for the machine. This is known as programming. The process of changing over can be summed up as a succession of analyses from broad concepts to finer and finer details.

In large and small companies alike, regardless of whether or not it is decided to adopt electronics, the economies resulting from an analytical review of present procedures should offset the cost by providing greater work simplifications. Improved management control and reporting speed may be of greater importance than the dollars saved.

Many companies feel they should defer any change-over to electronic computers pending further research. This theory is based on the rapid development of new machines, which immediately makes other models obsolete. A fallacy in such thinking is illustrated in the "Eniac," one of the first all-purpose computers for business, which is obsolete, but is still in profitable operation. Also, machines can be rented, minimizing the obsolescence factor. Another advantage in not waiting is that maximum use of the machine as a management control tool can be reached only through experience. The conversion to the use of electronics in business is one of evolution as well as revolution.

Conclusion

The future uses of electronic computers in business is unlimited, and, on the lighter side of life, there is the electronic chess player which, by means of its high speed calculations, can compute the possibilities in connection with each play and thus determine the best move. "He" may prove to be the champion. In a more practical vein, accurate weather predictions can be made from hundreds of calculations based on the aerological data gathered. In the not-too-distant future, you can consult the weatherman's electronic computer to determine if next week end will be good for golf!

In summation, the effect of electronic equipment on our economic life is of the same magnitude as the effect of the H-bomb on our military strategy. As in the case of atomic power, electronics and its potentialities must be made to work for the good of all mankind.

The Prize-Winning Articles for 1954

The firm is pleased to announce the winners for 1954 for the best articles by staff members published in the L. R. B. & M. JOURNAL. The selections were made by persons associated with the New York State Society of Certified Public Accountants, and are as follows:

First Prize—$1,000. Awarded to *R. A. Knecht* for his article entitled "A Program for Trust Cost Analysis."

Second Prize—$500. Awarded to *Julian O. Phelps* for his article entitled "Certain Tax Changes of Importance to Corporations."

The firm also offers prizes of like amounts for articles published in the *Journal of Accountancy*. It is hoped that in 1955 there will be competition for these prizes as well as for those offered by the L. R. B. & M. JOURNAL.

The L. R. B. & M. Journal

Published by Lybrand, Ross Bros. & Montgomery, for distribution to members and employees of the firm.

The purpose of this journal is to communicate to every member of the staff and office, plans and accomplishments of the firm; to provide a medium for the exchange of suggestions and ideas for improvements; to encourage and maintain a proper spirit of cooperation and interest, and to help in the solution of common problems.

PARTNERS

WILLIAM M. LYBRAND		T. EDWARD ROSS	
ROBERT L. AIKEN	Seattle	JAMES J. MAHON, JR.	Philadelphia
J. F. STUART ARTHUR	Dallas	WILLIAM F. MARSH	Pittsburgh
J. K. S. ARTHUR	Dallas	JOHN MCCULLOUGH	Detroit
PHILIP BARDES	New York	HOMER L. MILLER	Chicago
R. KIRK BATZER	New York	SAMUEL F. MIRANDY	New York
HERMON F. BELL	New York	JOHN L. MONETA	Philadelphia
JOSEPH W. BOWER	Pittsburgh	ALBERT G. MOSS	Dallas
HERBERT G. BOWLES	Los Angeles	ROBERT W. MYERS	Rockford
FRED M. BRESLIN	San Francisco	EDWIN P. NOELL	Cleveland
ROGER F. BURD	Baltimore	VICTOR L. NORRIS	London
J. EDWARD BURKE	Chicago	DONALD P. PERRY	Boston
HILTON R. CAMPBELL	New York	GLENN O. PETTY	Philadelphia
EDWARD G. CARSON	New York	JOHN C. POTTER	New York
HARRY N. CASE	New York	LOUIS H. RAPPAPORT	New York
WILLIAM P. CROUCH	Houston	MARK E. RICHARDSON	New York
LEONARD C. DAVID	Paris	PRICE G. RIGHTER	Detroit
FRED C. DENNIS	Cincinnati	DONALD M. RUSSELL	Detroit
GEORGE R. DRABENSTADT	Philadelphia	JAMES F. SANBORN, JR.	Boston
H. HILTON DUMBRILLE	New York	WALTER L. SCHAFFER	New York
HENRY C. ELFERS	New York	GUSTAVE F. SCHWEITZER	Philadelphia
CLAUDE R. GILES	San Francisco	GEORGE S. SHEGOG	New York
CLARENCE R. HAAS	Philadelphia	PRIOR SINCLAIR	New York
PAUL F. HALLORAN	Birmingham	THOMAS J. SNOWDEN	Saint Louis
JOEL D. HARVEY	Boston	EDMUND A. STAUB	Chicago
GEORGE A. HEWITT	Philadelphia	WALTER R. STAUB	New York
LINN W. HOBBS	Detroit	HARRY H. STEINMEYER	Philadelphia
ALBERT E. HUNTER	Boston	CONRAD B. TAYLOR	New York
J. WESLEY HUSS	Louisville	PHILIP J. TAYLOR	Philadelphia
ALVIN R. JENNINGS	New York	LEO V. TINKHAM	Rockford
GEORGE R. KEAST	San Francisco	MARK C. WALKER	Boston
CHRISTOPHER H. KNOLL	New York	ROBERT S. WARNER	Los Angeles
LOUIS D. KORK	Cleveland	WILLIS K. WATERFIELD	Cincinnati
NORMAN J. LENHART	New York	HARRY C. ZUG	Philadelphia

Editorials

Carl T. Keller

Carl Tilden Keller, who had been a partner of the firm in our Boston office for nearly forty years, died in Tucson, Arizona on May 13, 1955 after several months' illness.

Mr. Keller was born in 1872 at Fort Kearney, Nebraska, graduated from the Boston Latin School and received his A.B. degree from Harvard College in 1894. Prior to his association with our firm he had been general commercial superintendent of New England Telephone and Telegraph Company, of which his father was president for many years.

Actively interested in many organizations throughout his career, Mr. Keller was, among other things, a past vice president of the Boys' Club of Boston, a trustee of New England Museum of Natural History and a past president of the Club of Odd Volumes and of the Union Club of Boston. He served on the visiting committee of the Harvard College Library and of the Massachusetts Institute of Technology Library. His collection of *Don Quixote* was extensive, comprising editions in many languages, and now belongs to the Harvard Library.

For the past ten years Mr. Keller was a resident of Peterborough, in the Monadnock region of New Hampshire. Mrs. Keller died in 1954 and they had no children.

His sparkling charm of personality, his breadth of interests, ranging from financial affairs to scientific exploration, and his facility in reaching intimate acquaintance with all manner of people had endeared him to a vast number of friends throughout this country and abroad. As a long-term member of our firm, he will be greatly missed at our future gatherings.

William T. Sherwood

The Congressional Record of April 26 contained a report of a speech in the House by Representative Cooper, Chairman of The Joint Committee on Internal Revenue Taxation, in which he paid tribute to the distinguished services rendered by Mr. Sherwood during his 45 years of service with the Internal Revenue Service and as a member of The Advisory Group on Reorganization of the Service from 1952 to his death in April 1955. To quote Mr. Cooper in part:

> I know of no man who more completely and unselfishly devoted his life to Government service. Mr. Sherwood exemplified a devotion to duty and an integrity which make our career service in the Government so respected. Without such men as Mr. Sherwood, we would indeed find it difficult to make the machinery of Government function.

(*Continued on page 28*)

Notes

Baltimore Office

Messrs. L. P. Deering and W. H. Fisher received their Maryland C.P.A. certificates in February.

Mr. G. M. Zinkhan, Jr., was a panel member at a forum on the 1954 Revenue Code held in December at the University of Maryland by the Maryland Association of Certified Public Accountants.

Mr. H. Chinlund has been elected a director of the Maryland Association of C.P.A.'s.

Mr. Chinlund was a panel member at a forum on the subject of fees held in April by the Practitioners Advisory committee of the Maryland Association of Certified Public Accountants.

Birmingham Office

Mr. Halloran has been appointed a member of the Birmingham Chamber of Commerce Development Committee, which has had national recognition as the "Committee of 100."

Mr. W. Smith passed the November C.P.A. examination in North Carolina.

Boston Office

Mr. Perry was appointed to give this year's Dickenson Lectures at Harvard Graduate School of Business. His talk was on the present-day practice of public accounting and educational preparation therefor.

Mr. Perry is serving as a Vice President of the American Accounting Association.

Mr. Hunter has been re-elected Treasurer of the Boston Chamber of Commerce.

Mr. Walker was elected Vice President of the Massachusetts Society of C.P.A.'s for 1955-1956.

Mr. Joseph B. Fyffe has been elected Publication Director of the Boston Chapter of N. A. C. A.

Massachusetts C.P.A. certificates have been received by: John F. Aldrich, Jr., Henry A. Anderson, Seth A. Armen, Howard H. Freedman and Anthony C. Rose, Jr.

Mr. James K. Sanborn has been appointed Vice Chairman of the accountant's division of the 1955 Greater Boston Red Cross Campaign.

Mr. Francis E. Moore was the coordinator of a "Seminar in Practical Management for Small Manufacturers" sponsored by The Small Business Administration and Boston University, and held on Monday nights for the eight weeks ended March 7. This Seminar was repeated for another group in the eight weeks beginning March 21. Mr. Moore is in his twelfth year as instructor at Boston University Evening Division, where the subjects of his courses are "Accounting Systems" and "Auditing."

Mr. Herman Stuetzer has had the following speaking engagements: "Accounting Sections of the 1954 Internal Revenue Code" on December 11, 1954, before the Rhode Island Bar Association at Providence, R. I. "Some Important Business Decisions under the Internal Revenue Code" on December 14, 1954, to a joint meeting of the Chamber of Commerce and the Lions Club at Attleboro, Mass., and on January 18, 1955 to a meeting of the Rotary Club at Quincy, Mass.

On November 5 and 6, 1954, Mr. Stuetzer participated in a symposium in Cambridge on "Two Years of Republican Tax Policy and the Internal Revenue Code of 1954" conducted jointly by the Harvard Law School, the Department of Economics of Harvard College, and the Harvard Graduate School of Business Administration. Mr. Stuetzer and Mr. Leslie Mills were the only representatives of public accounting firms among the forty odd speakers and participants. The speakers included Kenneth W. Gemmill, Esq., former Assistant to the Secretary of the Treasury, and Prof. Dan Throop Smith, present Assistant to the Secretary of the Treasury.

On February 14, 1955, at the invitation of Prof. Stanley S. Surrey, of Harvard Law School, Mr. Stuetzer conducted Mr. Surrey's senior tax seminar at the Law School. The subject was "Accounting Sections of the 1954 Code." Prof. Dan Throop Smith, Assistant to the Secretary of the Treasury, and Prof. J. Keith Butters, both of the Havard Business School faculty, also participated in the seminar.

On Monday, April 18, 1955, Mr. Stuetzer spoke to the Boston Chapter of the Tax Executives Institute on "Practical Problems under the 1954 Code."

On May 23, he participated in a one act play dealing with estate planning and entitled "Where There's a Will." The other participants included a member of the Boston bar, a life insurance man and a business man. The play was presented to the 46th Annual Meeting of the American Steel Warehouse Association.

On April 2, Mr. Stuetzer was elected Selectman of the Town of Hingham in a four-cornered race. The principal opponent was the incumbent who was seeking re-election for a fourth term.

Mr. Joseph A. Keefe has been appointed a Member of the Finance Committee of the Town of Arlington, Mass.

Mr. Edward L. Gates has been elected a Director of the Manchester Taxpayers Association. Mr. Gates recently taught a special course on the "Federal Tax Code of 1954" for the Boston Chapter of the American Institute of Banking.

An article by Mr. Victor Cohen entitled "Income under the 1954 Code" was published in the Janu-

ary, 1955, issue of the "News Bulletin" of the Massachusetts Society of C.P.A.'s.

Mr. Seth A. Armen, a Member of the Norfolk, Wrentham, Plainville Regional District School Committee, has been elected Treasurer by the Committee. He is also teaching "Mathematics of Accounting" at Northeastern University in the Evening Division.

Chicago Office

A regional meeting on "Management Accounting Services" was held in Chicago, November 23, 1954, attended by representatives from the following offices: Birmingham, Chicago, Cincinnati, Dallas, Detroit, Houston, Louisville, Pittsburgh, Rockford and Tulsa. About 40 partners and members of the staffs attended the all-day session, the program for which was arranged by members of the Detroit office staff under the direction of Mr. Donald M. Russell, who acted as Master of Ceremonies. Those taking part in the program included Messrs. Russell, Bolz, Fox, Padgett and Scharff of Detroit, and Mr. Edmund A. Staub of Chicago. A film produced by the American Management Association on "Integrated Data Processing" was shown, following which luncheon was served. The meeting closed after a lively discussion period in which many of those present participated.

Mr. J. Edward Burke has been appointed Chairman of Accountants' Group for 1955 Red Cross Campaign. He has designated Walter H. Becker as Vice-Chairman. Mr. Burke addressed the Calumet Chapter of N. A. C. A. on "Prevention and Detection of Shortages" at a discussion forum January 18, 1955. Mr. Burke was recently elected a Director of the Illinois Society of Certified Public Accountants for a 2-year term.

Miss Marion E. Ayres has been awarded her Illinois C.P.A. certificate on the basis of the November, 1954 examination.

Cincinnati Office

Mr. Eugene F. Warren was one of the panel members who discussed the Revenue Act of 1954 at the November 17th meeting of the Cincinnati Chapter, Ohio Society of C.P.A.'s. Mr. Warren also gave a talk on the 1954 Revenue Act as it affects the individual taxpayer, before the Tuesday luncheon group of the Cincinnati Association of Credit Men.

Mr. Waterfield discussed "Alternative Procedures in Connection with Examination of Accounts Receivable" at the December meeting of the Cincinnati Chapter, Ohio Society of C.P.A.'s.

Mr. Daniel R. Hubler has received his Ohio C.P.A. certificate.

Mr. Abner J. Starr gave a talk on "Amateur Radio" before the

Cincinnati Rotary Club on March 3. He was recently elected President of the Greater Cincinnati Amateur Radio Association, a group of over four hundred members.

Mr. Dennis is currently serving as First Vice President and as a member of the Executive and the C.P.A. Legislation Committees of the Ohio Society. He is also Chairman of Law Enforcement and Ethics Committee of the Cincinnati Chapter. Mr. Waterfield is serving as a Director and Mr. Abner J. Starr is a member of the Constitution Committee of the State Society.

Messrs. Robert W. Davis and Stanley E. Walker are lecturers on Accounting at the Evening College, University of Cincinnati. Messrs. Joseph H. Eversmann and Raymond J. Leisner are serving in a similar capacity at Xavier University Evening College. In February, Mr. Leisner addressed the Xavier Accounting Society.

Mr. Abner J. Starr was Chairman of the Auditing Committee for the 1954 Community Chest Campaign for Hamilton County.

Cleveland Office

Messrs. Kork and Talmadge are members of the Taxation and Finance Committee of The Citizens League of Cleveland.

Mr. Noell has been reappointed as a member of the American Institute of Accountants' Committee on National Defense. He is also a member of the Committee on Cooperation with Lawyers for the Cleveland Chapter of the Ohio State Society.

On April 20, Mr. James P. Colleran was a member of a panel which discussed the proposed Regulations on Compensation for Injuries and Sickness, and Amounts Received under Accident and Health Plan (Sections 104 and 105). The panel discussion was one of a series sponsored jointly by the Cleveland Chapter of the Ohio Society of Certified Public Accountants, the Cleveland Bar Association and the Tax Club of Cleveland, to be held as proposed Regulations are released.

Mr. Colleran also addressed the Lions Club of Berea and the Kiwanis Club of Bay Village on the subject The Internal Revenue Code of 1954.

On January 12, Miss Katherine E. Pfeifer acted as moderator of a workshop on personal income tax presented before the Inter-Club Council by the Cleveland Chapter of the American Society of Women Accountants.

Dallas Office

Mr. W. G. Welsch spoke on December 15 to the Dallas Chapter of the Institute of Internal Auditors; on January 13 he addressed the Oklahoma City Chapter of the

Institute of Internal Auditors; on January 31 he gave a paper on the "Individual under the 1954 Code" to the Oak Cliff Rotary Club; and on March 31 he spoke at the Southern Regional Conference of the Comptrollers' Institute of America at Tulsa, Oklahoma. He also is the Oil and Gas Editor of the Journal of Taxation.

Detroit Office

Mr. Laurence J. Wilson, in his capacity as an Associate Director of Detroit Chapter, N. A. C. A., is also a Division Commander in charge of ten teams in the Chapter Activity Contest.

Mr. John J. Fox is a Team Captain in the Chapter Activity Contest of the Detroit Chapter, N. A. C. A., and at January 1, 1955, his team was No. 1 out of forty teams.

Mr. Fox is serving on the Committee on Publications for the Detroit Chapter of the Systems and Procedures Association of America. He is also serving on the Committee on Professional Ethics of the Michigan Association of Certified Public Accountants.

Miss Anne Hutchison retired from active service on January 15, 1955. She had served as secretary at the Detroit office for many years, her original employment being on February 28, 1929.

Los Angeles Office

The following staff members have passed their California C.P.A. examinations:

Marshall M. Johnson
William F. Gavin

Mr. Gavin also passed the California Bar examinations as did Mr. Rudolph Gradishar.

Louisville Office

Mr. Huss spoke at a discussion forum presented by the Louisville Chapter of N. A. C. A. The forum was titled "Revenue Act of 1954—Its Effect on You and Your Company." Mr. Huss's speech dealt with "Conformance of Tax Accounting to General Accounting."

Mr. Huss is serving as Chairman of the American Institute of Accountants' Committee on Coordination of Activities of State and National Organizations. He presided at the meeting on May 3 of the State Society Presidents at the Spring Council meeting of the Institute at White Sulphur Springs, West Virginia.

Mr. Huss was a member of a tax panel at the joint meeting on April 21 of the Louisville Chapter of the Tax Executives Institute and the Louisville Control of the Controllers Institute of America.

Mr. Huss has been appointed to the Taxation Committee of the Louisville Chamber of Commerce. He also has been appointed to the

nominating committee for officers and directors of the Estate Planning Council of Louisville.

Mr. Huss spoke to the freshman and sophomore classes of Bellarmine College on March 1, and on March 22, to the Crestwood, Kentucky, Lions Club. The subjects of Mr. Huss's talks were "A Career in Accounting" and "Opportunities for Tax Planning," respectively.

Messrs. Curtis J. French and J. Martin Conder have been elected directors of the Louisville Chapter of N. A. C. A. for the 1955–1956 year. Mr. French is to be Director in Charge of Employment and Mr. Conder is to head the Committee on Publications.

Mr. Louis Sorbo served on two tax forums for the Kentucky Society of Certified Public Accountants. On March 22, on a program of the Society devoted to the new 1954 Internal Revenue Code and the new State tax laws, the panel discussed "Problems Every Accountant has Encountered in the Preparation of Returns." On April 26 at the Fourth Annual Conference on Accounting held at Kenlake Hotel, Kentucky Lake State Park, the panel discussed "Problems of the Small Corporation." Mr. Sorbo also spoke at the University of Louisville Tax Forum sponsored by the Kentucky Society of Certified Public Accountants. The text of Mr. Sorbo's talk was "The Revenue Act of 1954—Depreciation."

Philadelphia Office

Mr. Mahon has given talks before the following groups:

Philadelphia Chapter, Tax Executives Institute, on the subject of "The Internal Revenue Bill of 1954."

Institute on Taxation, Texas Society of C.P.A.'s, University of Houston, Texas, on "Depreciation Under the 1954 Code."

Reading Chapter, the National Association of Cost Accountants, on "The Revenue Act of 1954."

Mr. Mahon has been elected for a term of four years to membership on the Board of Directors of the Chamber of Commerce of Greater Philadelphia.

Mr. Taylor served on a board for the examination of candidates to fill the position of Assistant Finance Director for the City of Philadelphia. He also spoke on January 5th at Columbia Institute-Taylor School, Philadelphia, on the subject "Careers in Accounting."

Mr. Petty spoke at the Villanova University Career Conference, Villanova, Pa., on February 17th, his subject being "Preparation for the Interview."

Mr. Herman C. Heiser on January 20th addressed the Richmond, Va., Chapter of N. A. C. A. on the subject "Direct Costing." He also addressed the Omaha, Nebraska, and Des Moines, Iowa, Chapters of N. A. C. A. on March 22nd and 23rd, respectively, on the same subject.

On April 18th, he also addressed the Pennsylvania Institute of Certi-

fied Public Accountants' Philadelphia Chapter on "Budgeting for Small Business."

Mr. Richard T. Farrand addressed a joint meeting of the Delaware Accountants' Association and Delaware Society of C.P.A.'s at Wilmington on February 22nd, his topic being "The Internal Revenue Act of 1954." On April 29th he was the guest speaker at the luncheon meeting of the Stradley Tax Group, Philadelphia, his topic being "What Industry Can Learn from Tax Experiences of Public Utilities."

Mr. George J. Kira was a member of the panel which discussed "Methods of Taking Inventory" at the meeting on April 12th of the Trenton Chapter of the National Association of Cost Accountants.

Messrs. Herman C. Heiser, W. G. Casey, H. G. Hunsberger and J. E. Meredith, Jr., attended a special course for C.P.A.'s and Management Consultants on the subject "Electronic Accounting Machines," conducted by the International Business Machines Corporation at Endicott, N. Y., on February 21st to 25th.

New York Office

Mr. Bardes was elected President of the N. Y. U. Men in Finance Club, an organization of business and banking executives in New York City.

Mr. Bardes was moderator at a discussion of "Tax Savings for Business" at the Annual Dean's Day Homecoming Conference of the New York University Graduate School of Business Administration on March 12, 1955.

Mr. Bardes has been appointed a member of the Taxation Committee of the National Association of Manufacturers.

Messrs. Bardes and Richardson discussed "Year-End Closing Problems and Current Developments" before the New York Chapter of Tax Executives Institute, Inc., on February 7, 1955.

Mr. Richardson addressed the Long Island Chapter of the National Association of Cost Accountants on January 18, on "Current Developments under the New Federal Tax Law."

Mr. Batzer spoke at the April 21 meeting of the New York State Society of C.P.A.'s on the subject "Experiences with A. I. A. Auditing Bulletin #25—Events Subsequent to the Date of Financial Statements."

Mr. Raymond G. Ankers has been elected a Vice President of the New York State Society of C.P.A.'s.

Mr. Ankers was one of those responsible for the production of the American Institute of Accountants' career film, "Accounting—The Language of Business." The film has won an award as one of the ten best sponsored films in the sixth annual contest of "Scholastic Teachers" magazine. A national panel of audio-visual experts selected the movie from 160 eligible titles on the

basis of its usefulness in high school classrooms.

The following staff members successfully completed the November, 1954 C.P.A. examinations. Unless indicated otherwise, the examinations were passed in New York.

Baris, Marvin L.
Barsotti, Alfred R.
Becker, Donald W. (Pennsylvania)
Boas, Jr., Fred
Emolo, John R.
Green, Bradley H.
O'Donnell, Jr., John J.
Okazaki, Frank K.
Palamara, Francis J.
Schaefer, Francis J.
Simon, Stanley C. (Tennessee)
White, Margaret M.
Deisher, Frederick C.
Replogle, Fred W. (Indiana)

Pittsburgh Office

Mr. Marsh spoke before the Birmingham and Pittsburgh Chapters of N. A. C. A. on April 20 and May 18 on "Interpreting Cost and Financial Statements for Management."

Mr. Bower spoke on "Current Trends in Presenting Financial Statements to Shareholders" before a joint meeting of the Pittsburgh Chapter of the Pennsylvania Institute of C.P.A.'s and the Credo Club of the Credit Association of Western Pennsylvania on May 24.

Mr. Bower, for the third year, has been elected a director of the Pittsburgh Chapter of N. A. C. A.

Mr. Gelbert participated in a tax panel session on April 10 presented over Station KDKA-TV by the Pittsburgh Chapter of the Pennsylvania Institute of C.P.A.'s. He also spoke on May 22 at The Pennsylvania State University Tax Seminar on "Corporation Income Taxes" and was a discussion leader on "Corporate Tax Problems."

Mr. Wallace spoke at the University of West Virginia as a representative of the Committee on Education of the Pittsburgh Chapter of Pennsylvania Institute of C.P.A.'s.

Mr. Marsh and Mr. McHugh are serving on the Children's Hospital Building Fund Drive Committee. Mr. Bower is serving on the YMCA-YWCA Building Fund Drive Committee.

Rockford Office

Mr. Tinkham has been named a member of the Chapter Activities Committee of the Illinois Society of C.P.A.'s for the 1955–56 year. He is also serving as a Vice President of the Rockford Chapter, N. A. C. A., for the 1955–56 year.

On April 21, 1955, Mr. Tinkham took part in a round-table discussion of estate planning at a meeting of the Rockford Association of Life Underwriters.

Mr. Myers is serving as a member of the Rockford Citizens Committee for Family Protection.

Mr. Edward Mezner addressed the School of Office Administration sponsored by the Rockford Real Estate Board on February 8, 1955. His subject was "How to Make Your Work Easier."

Mr. Morris J. McCarthy has been re-elected treasurer for the Northern Chapter, Illinois Society of C.P.A.'s for the 1955–56 year.

St. Louis Office

Mr. Snowden acted as meeting chairman of the October 13, 1954 meeting of the St. Louis Chapter of Missouri Society of Certified Public Accountants at which Mr. Robert S. Warner spoke on the subject "Relations Between Accountants and Lawyers."

Mr. Kermit M. Pennington served as a member of the panel which interviewed Commissioner T. Coleman Andrews prior to his talk at a meeting in St. Louis on November 15, 1954. The meeting was sponsored by the St. Louis Chapter of the Missouri Society of Certified Public Accountants of which Mr. Pennington is currently serving as president.

Mr. Kermit M. Pennington spoke on "The Application and Use of Machines and Electronics in Accounting" at a meeting of the Cedar Rapids, Iowa, Chapter of the N. A. C. A., April 19, 1955.

Mr. E. F. M. Meyer participated in a panel discussion on "Cost Reduction and Control" at a meeting of the St. Louis Control of the Controllers Institute, February 22, 1955.

Messrs. Richard J. Milles and Stephen D. Saboff have been admitted to membership in the American Institute of Accountants.

San Francisco Office

Mr. Giles has been appointed Consulting Professor of Public Accounting in the Stanford University Graduate School of Business. This position had likewise been held for a number of years by Mr. Keast.

Seattle Office

Mr. B. U. Krummel has been appointed as a lecturer in the Extension Department of the University of Washington.

Tulsa Office

Mr. McKibben has been appointed to the Budget Committee of the Tulsa Community Chest. He has also been appointed a Trustee of the Oklahoma Society of Certified Public Accountants and has been elected Vice President of the Tulsa Chapter of the State Society.

Mr. McKibben has also been asked to serve again on the Finance Committee of the Tulsa Y. M. C. A.

Editorials

(*Continued from page 19*)

At the time Mr. Sherwood retired from the Service in 1948 he was Assistant Commissioner of Internal Revenue, the highest career position in the organization. He was subsequently associated with our Washington office as a consultant from 1948 until becoming a member of the Advisory Group on Reorganization in 1952. He was a man of outstanding attainments, highly respected and a fine gentleman.